

The Medicare AAA Screening Benefit: Who is covered (and who is not)

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Effective January 1, 2007, Medicare will pay for a one-time ultrasound screening for abdominal aortic aneurysm (AAA) for beneficiaries who meet the following criteria:

- Receive a referral as a result of an initial preventive physical examination (IPPE); AND
- Receive the ultrasound screening from an authorized provider or supplier; AND
- Have not been previously furnished a AAA screening under the Medicare Program; AND
- Have risk factors including at least one of the following:
 1. A family history of AAA;
OR
 2. A 65 to 75 year old male who has smoked e" 100 cigarettes in his lifetime;
OR
 3. Is a beneficiary, who manifests other risk factors in a beneficiary category recommended for screening by the United States Preventive Services Task Force (USPSTF) regarding AAA, as specified by the Secretary of Health and Human Services, through the national coverage determinations process.^{1, 2, 3}

Notable exceptions from coverage include:

- Any referral that does not originate from the IPPE, which must occur within six months of the start date the beneficiary's first Medicare Part B coverage period. This functionally means that no coverage exists if the IPPE has already occurred or if more than six months has lapsed since the start of the patient's first Medicare Part B coverage period.
- Females with no family history of AAA.
- Males that have never smoked and have no family history of AAA.

As a result of these limitations, requirements for patients that are otherwise excluded from the benefit but desire AAA screening include:

- An order for AAA screening from an appropriately licensed practitioner; AND
- Patient acknowledgement of personal financial liability if the claim is denied by the Medicare Contractor by signing an Advanced Beneficiary Notice (ABN).

In the United States, 15,000 deaths a year are attributed to aneurysms of the aorta, with 9,000 of these being AAAs.⁴ Furthermore, the incidence appears to be increasing, which is likely related to the aging of our population and improvements in diagnostic testing. Estimated prevalence in patients over 60 years old is 4 to 8 percent. If the AAA ruptures, only 10-25% of patients survive.⁵⁵

An abdominal aorta with a diameter of greater than 3 cm. is considered aneurysmal. Aneurysms expand by an average rate of 0.3 to 0.4 cm per year and the risk of rupture increases significantly if the diameter is 5 cm or greater.⁷

Historically, screening for AAAs has been controversial. Concerns about cost effectiveness, morbidity associated with elective surgery and adverse psychological effects have kept routine screening from being accepted by Medicare and other third party payers. A recent review, however, concluded; "...population screening for AAA in men age 65 to 74 years appears to reduce deaths from AAA. Treatment is associated with significant risks for operative death and complications. These risks, however, may be acceptable to men with AAAs greater than 5.5 cm, which are most prone to rupture."⁸

The Society of Vascular Surgery and the Society for Vascular Medicine and Biology recommend AAA screening in all men age 60 to 85 years, women age 60 to 85 years with cardiovascular risk factors, and men and women age 50 years and older with a family history of AAA. These groups further recommend the following courses of action after screening: no further testing if aortic diameter is less than 3.0 cm, yearly ultrasound screening if aortic diameter is between 3.0 to 4.0 cm, ultrasound examination every 6 months if aortic diameter is between 4.0 to 4.5 cm, and referral to a vascular specialist if aortic diameter is greater than 4.5 cm.¹⁰

AAAs may be entirely asymptomatic until rupture. The common presentation before rupture is a pulsatile abdominal mass. Palpating the abdomen has moderate sensitivity in detecting aneurysms greater than 5 cm. in diameter, but cannot be relied on to exclude AAA, especially on obese patients.¹² An incidental finding on an abdominal x-ray may be a calcific outline suggestive of AAA.¹³ This finding,

(End Notes)

evidence of distal embolic events (blue toe syndrome) or a pulsatile abdominal or popliteal mass warrants a diagnostic study. These are indications for further examination and thus are **not considered a screening test**.

Symptoms of rupture include epigastric or back pain (usually indistinguishable from a general backache) or hypovolemic shock.¹⁴ The general vagueness of symptoms may delay initial diagnosis.

There is an association of AAA and concomitant popliteal or femoral aneurysms, and this occurs approximately 14% of the time.¹⁵ Popliteal aneurysms are frequently bilateral, and of patients with known popliteal aneurysms, 37% also have AAA.¹⁶

Abdominal aortic aneurysms pose a serious health threat. Ultrasound is a safe and effective method for detecting this condition in a high risk population. According to the U.S. Preventive Services Task Force; "There is good evidence that abdominal ultrasonography, performed in a setting with adequate quality assurance (that is, in an accredited facility with credentialed technologists), is an accurate screening test for AAA."²⁰

Pacific Vascular is a fully accredited vascular lab and we have a follow-up program for AAAs. We can enroll your patient in this program to help you assure routine surveillance recommendations are maintained.

(The opinions and recommendations expressed in this article are those of the author and do not necessarily reflect the position of Pacific Vascular or any of its Associated Physicians.)

- ¹ S. 1932; Deficit Reduction Act of 2005; Section 5112. Medicare Coverage of Ultrasound Screening for Abdominal Aortic Aneurysms. Signed Feb 8, 2006.
- ² Medicare Program Revisions to Payment Policies, Five-Year Review of Work Relative Value Units, Changes to the Practice Expense Methodology Under the Physician Fee Schedule, and other changes to Payment Under Part B; Revisions to the Payment Policies of Ambulance Services Under the Fee Schedule for Ambulance Services; and Ambulance Inflation Factor Update for CY 2007: CMS-1321-FC: Nov 1, 2005. <http://www.cms.hhs.gov/PhysicianFeeSched/PFSFRN/itemdetail.asp?filterType=none&filterByDID=99&sortByDID=4&sortOrder=ascending&itemID=CMS1188377&intNumPerPage=10>
- ³ Ultrasound Screening for Abdominal Aortic Aneurysm. CMS Manual System, Pub 100-04, Medicare Claims Processing, Ch 18 Preventative and Screening Services, §110.2 Coverage. <http://www.cms.hhs.gov/manuals/downloads/c1m104c18.pdf>
- ⁴ Deaths: Preliminary Data for 2003. Hoyert DL, Kung H, Smith BL: National Vital Statistics Report. Vol. 53, No. 15 http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_15.pdf
- ⁵ Screening for Abdominal Aortic Aneurysm: A Best-Evidence Systematic Review for the U.S. Preventive Services Task Force. Fleming C, Whitlock EP, Beil TL, Lederle FA; Ann. Intern Med. 2005;142:203-211
- ⁶ The aneurysm detection and management study screening program: validation cohort and final results. Lederle FA, Johnson GR, Wilson SE, et al. Arch Intern Med. 2005;142:203-211
- ⁷ The natural history of abdominal aortic aneurysms. Guirguis EM, Barber GG; Am J Surg. 1991 Nov;162(5):481-3.
- ⁸ Screening for Abdominal Aortic Aneurysm: A Best-Evidence Systematic Review for the U.S. Preventive Services Task Force. Fleming C, Whitlock EP, Beil TL, Lederle FA; Ann Int Med 2005 Feb142(3):203-211
- ⁹ Screening for Abdominal Aortic Aneurysm: Recommendation Statement. U.S. Preventive Services Task Force Ann Int Med 2005 Feb142(3): 198-202
- ¹⁰ Screening for abdominal aortic aneurysm: a consensus statement. Kent KC, Zwolak RM, Jaff MR, et al; J Vasc Surg. 2004;39:267-9.
- ¹¹ Smokers' relative risk for aortic aneurysm compared with other smoking-related diseases: a systematic review. Lederle FA, Nelson DB, Joseph AM; J Vasc Surg. 2003;38:329-34.
- ¹² The Accuracy of Physical Examination to Detect Abdominal Aortic Aneurysm. Fink HA, Lederle FA, Roth CS, et al; Arch Intern Med. 2000;160:833-836
- ¹³ The rational clinical examination. Does this patient have abdominal aortic aneurysm? Lederle FA, Simel DL; JAMA. 1999 Jan 6;281(1):77-82.
- ¹⁴ The Merck Manual of Geriatrics, Sec. 11, Ch. 95 Aneurysms. Beers M, Berkow R, Editors; Internet Edition 2000. http://www.merck.com/mrkshared/mm_geriatrics/home.jsp
- ¹⁵ Incidence of femoral and popliteal artery aneurysms in patients with abdominal aortic aneurysms. Diwan A, Sarkar R, Stanley JC, et al; J Vasc Surg. 2000 May;31(5):863-9.
- ¹⁶ Atherosclerotic popliteal aneurysm. Dawson I, Sie RB, van Bockel JH. Br J Surg. 1997 Mar; 84(3):293-9.
- ¹⁷ Perioperative outcomes after open and endovascular repair of intact abdominal aortic aneurysms in the United States during 2001. Lee WA, Carter JW, Upchurch G, et al; J Vasc Surg. 2004 Mar;39(3):491-6.
- ¹⁸ Endovascular treatment of abdominal aortic aneurysms. Towne JB. Am J Surg. 2005 Feb;189(2):140-9.
- ¹⁹ A meta-analysis of 50 years of ruptured abdominal aortic aneurysm repair. Bown MJ, Sutton AJ, Bell PR, Sayers RD; Br J Surg. 2002;89:714-30
- ²⁰ Screening for Abdominal Aortic Aneurysm: Recommendation Statement. U.S. Preventive Services Task Force. Ann Int Med 2005.142: 198-202.

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